

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
Service Rules for Advanced Wireless Services in) WT Docket No. 04-356
the 1,915–1,920 MHz, 1,995–2,000 MHz,)
2,020–2,025 and 2,175–2,180 MHz Bands)
)
To: The Commission

Reply Comments of the Society of Broadcast Engineers, Inc.

The Society of Broadcast Engineers, Incorporated (SBE), the national association of broadcast engineers and technical communications professionals, with more than 5,000 members world wide, hereby respectfully submits its reply comments in the above-captioned Notice of Proposed Rulemaking (NPRM) relating to service rules for Advanced Wireless Service (AWS) stations in the 2 GHz band.

I. None of the CMRS Comments Addressed OOB Interference To TV BAS

1. None of the comments filed by commercial mobile radio service (CMRS) operators addressed the out of band emissions (OOBE) interference threat to highly sensitive 2,025-2,110 MHz TV Broadcast Auxiliary Service (BAS) receive sites, widely used in support of electronic news gathering (ENG) operations. While several CMRS entities (*e.g.*, Sprint) filed comments concluding that stricter OOB limits were needed to avoid CMRS-into-CMRS adjacent channel/adjacent-band operations, these analyses did not address the impact of AWS OOB into 2 GHz TV BAS operations.
2. Accordingly, SBE finds nothing in the filed comments to refute its contention that a more stringent OOB mask of at least $67 + 10\log P$ decibels (where P is the transmitter power output (TPO) in watts) is needed for 2,020–2,025 MHz AWS base stations to ensure that interference is not caused to ENG receive only (RO) sites, and further that no AWS base station may be located within 0.5 km of an existing ENG receive only site without installing stricter OOB filters, sufficient to ensure that the noise floor of the ENG RO site is not degraded by more than 0.5 dB. To ensure that AWS base stations are not inadvertently sited close to an ENG RO site,

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proposed CMRS AWS base station sites within 0.5 km of a 2 GHz ENG receive only site should be another exception¹ to area licensing.

II. Reply Comments of NAB

3. The National Association of Broadcasters (NAB) filed reply comments on January 7, 2005, the initially specified reply comment deadline. However, pursuant to a November 19, 2004, Order, the reply comment deadline had been extended to January 24, 2005. Further, pursuant to an additional January 19, 2005, Order², the ET 04-356 reply comment deadline has been further extended, to February 8, 2005.

4. SBE is gratified to read in the early-filed NAB reply comments that NAB fully supports the SBE comments, including SBE's call for the Universal Licensing System (ULS) to at long last be modified to allow existing TV Pickup station licenses to enter the locations and heights of their ENG RO sites, and in a manner that is searchable on a radius around a given set of geographic coordinates basis. This will allow interested parties, especially 2,020–2,025 MHz CMRS AWS entities, to determine in advance whether a proposed base station is too close to an existing ENG receive only site to allow construction on an area licensing basis (that is, without a prior application and site-specific authorization).

¹ Existing exceptions to area licensing are (1) stations requiring coordination pursuant to an International agreement; (2) stations that would require an Environmental Assessment pursuant to Section 1.1307 of the FCC Rules; (3) stations that would affect a radio quiet zone; and (4) stations that would require FAA notification and approval, and an FCC Antenna Structure Registration (ASR).

² Although the Order states it was also released on January 19, 2005, it was not posted to the FCC Daily Digest until January 21, 2005.

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III. Summary

5. It is imperative that 2,020–2,025 MHz AWS CMRS base stations be required to suppress their OOB by at least $67 + 10\log P$ decibels, and that no AWS CMRS base station be allowed within 0.5 km of an ENG receive only site without being required to install whatever additional filtering is necessary so that the noise floor of the receiver at the ENG RO site is degraded by no more than 0.5 dB. Thus, as an additional exception to area licensing, any proposed 2,020–2,025 MHz AWS base station within 0.5 km of an ENG receive only site should be required to first submit an application and obtain a site-specific authorization. That site-specific authorization should be conditioned on a showing that the noise floor of the nearby ENG RO site is properly protected. To allow CMRS AWS entities to determine in advance the locations of TV BAS ENG RO sites, and thus have the option of avoiding a more stringent OOB requirement and the need to first obtain a site-specific authorization, the ULS should at long last be modified to allow TV Pickup licensees to document the locations and heights of their ENG receive only sites. Further, this information must be in fields that are searchable on a radius around a specified set of geographic coordinates basis.

Respectfully submitted,

Society of Broadcast Engineers, Inc.

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